

# DEALING WITH ISAs IN THE PROBLEM REPORTING SYSTEM (PRS)

Sponsored by your neighborhood  
Mission Operations Assurance  
Manager

## We're Here to Help You

# REALLY WE ARE 😊

- ◉ Enhance the likelihood of mission success by **assisting** in the identification, assessment and mitigation of risks through the implementation of MOA processes for the project.
- ◉ Independent as in taking a fresh look, not guaranteed contrary or negative
- ◉ Help improve the problem reporting process so it is a useful tool for you and future missions

# WHAT DO WE CALL OPS FAILURE REPORTS?

## ◎ ISAs – Incident, Surprise, Anomaly

- The ISA reporting system covers all incidents, surprises, and anomalies observed by the flight team on flight/ground hardware, flight/ground software, and test/operational processes/procedures.
- ISAs are initiated on events that indicate unexpected performance of the ground system, flight system, or flight team.

# WHAT ELSE DO WE CALL THEM?

## (BE NICE)

### ◎ PFRs – Problem Failure Reports

- For anomalies documented in an ISA which are determined to be a flight hardware/software design problem or failure, a corresponding P/FR is generated.
- The P/FR requires no additional signatures.
- The P/FR is administratively closed with reference to the corresponding ISA that documents the closure information.



# WHAT IS A PROBLEM?

- ⦿ It would be nice if the show time function for our Target Tool used a 16 bit clock instead of an 8 bit clock.
  - ⦿ The requirement is for 8 bit precision so this should be a change request not an ISA
- ⦿ I wish the cryogenic coolers would reach the temperature I desire of  $-273^{\circ}\text{C}$ .
  - ⦿ The requirement is  $-275^{\circ}\text{C}$  so this is a real problem to be documented in an ISA if it doesn't reach the desired/required temperature

# AND WHY REPORT IT?

- You don't want an issue to slip through the cracks or be forgotten or dismissed without due diligence
- You have an issue that may affect another project
  - Gas valves on Phoenix are on MSL
  - Cryo-coolers on one flying instrument may be used by other instruments
- You've learned a lesson that is worth sharing

# WHAT'S IN IT FOR YOU?

- ◉ Visibility

- Management will see that you are taking action to facilitate in the resolution of problems.

- ◉ Time Management

- As an author, you can forget about the subject, and concentrate on other work.
- As an assignee, you can use the list of open ISAs as part of your To-Do list, saving precious time.

- ◉ Help

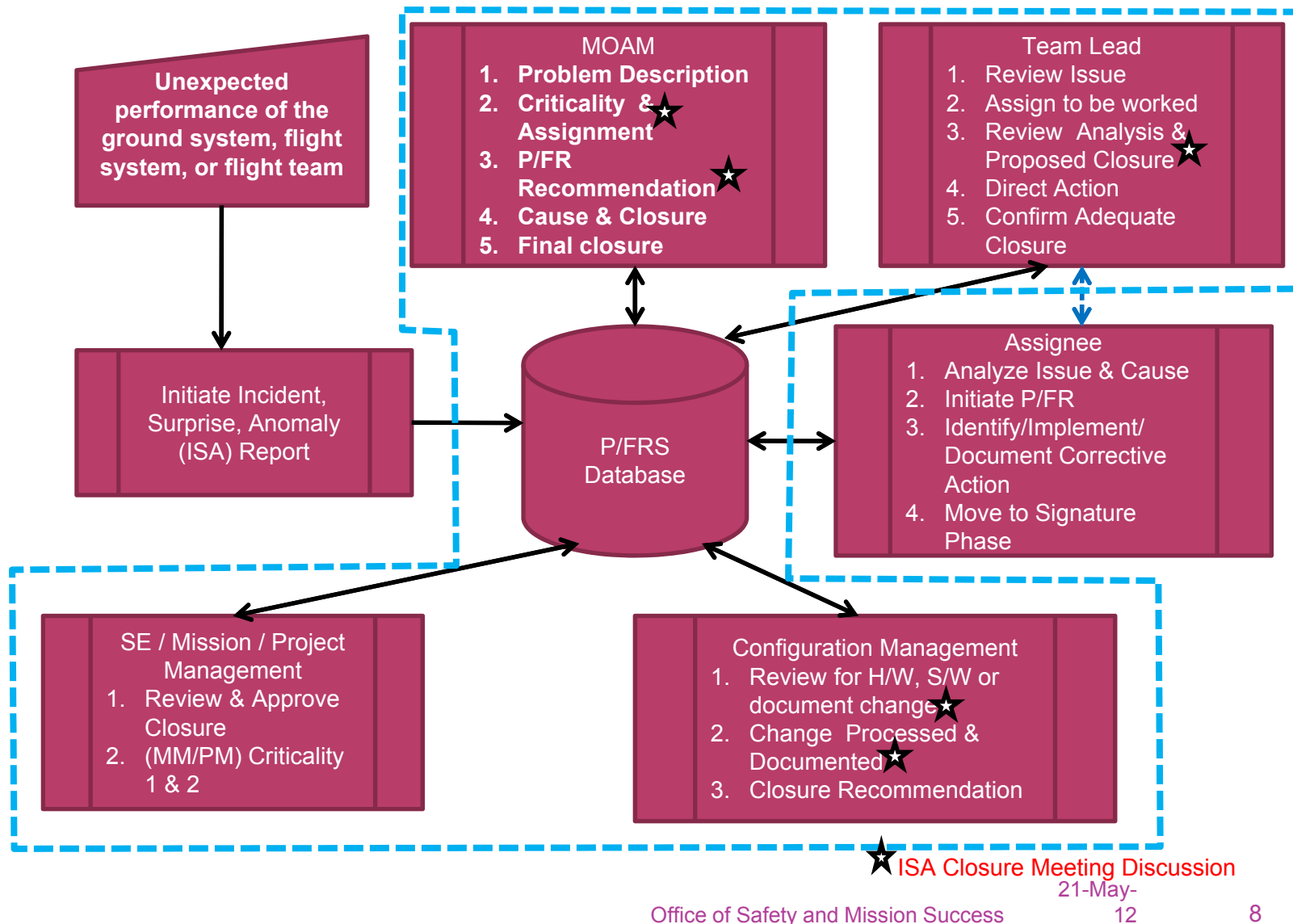
- Once you create the ISA, it is managed by someone else.
- If you feel overwhelmed when you have a lot on your plate, Management can help prioritize ISAs assigned to you.

- ◉ Historical Information

- Closure of an ISA is logged in the system
- If no good reason to close is arrived at, the ISA stays open

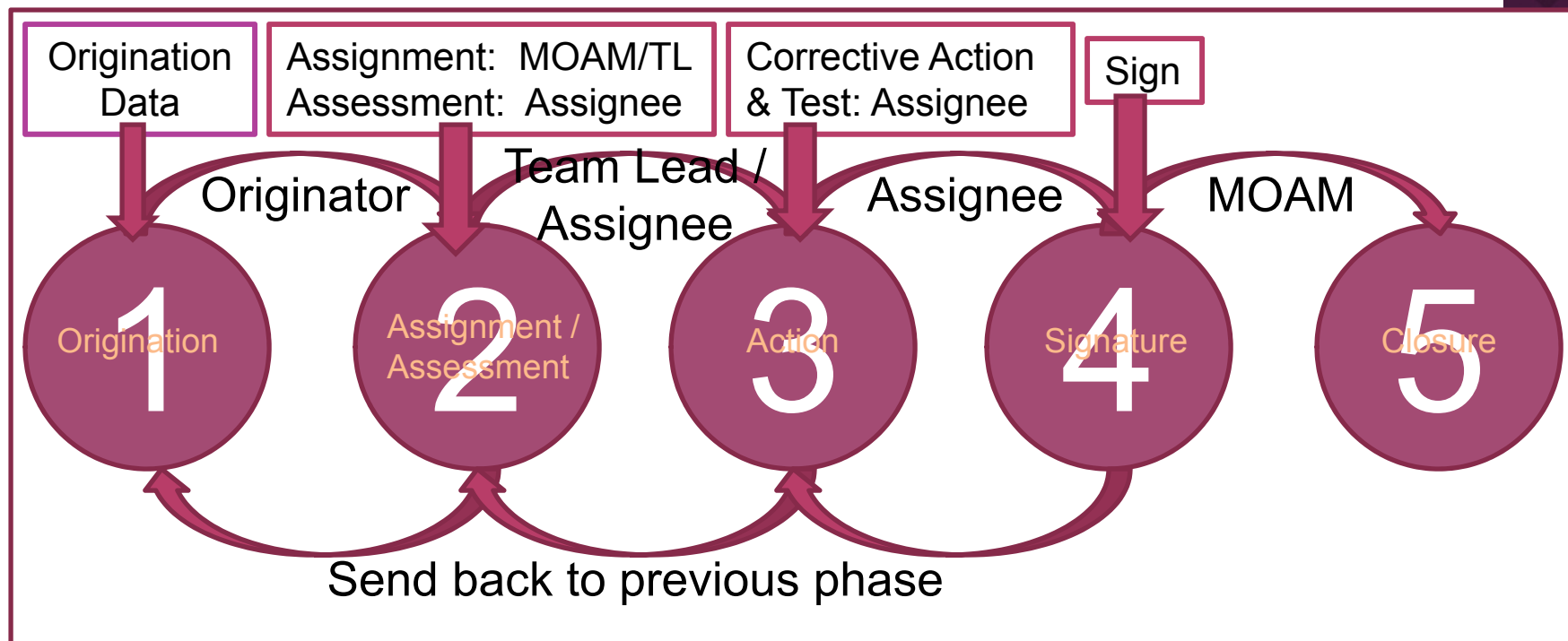
# ONE SIMPLE PROCESS

## WITH ANOMALY REVIEW BOARD (ARB) ROLES



# THE PRS FOLLOWS A SPECIFIC LIFE CYCLE TO PROCESS AN ISA

- ◉ This lifecycle is the series of phases that an ISA moves through during the resolution process. The first phase of a ISA lifecycle is Origination and the last phase is Closure. The phases in between are Assignment/Assessment, Action and Signature.
- ◉ The PRS has an interesting vocabulary, specifically:
  - “Responsible Editor” and “Team Lead” are the same person, and
  - The Team Lead has to use the “Reassign” action to assign an ISA to someone to work.



# SO LET'S EXPLORE PRS

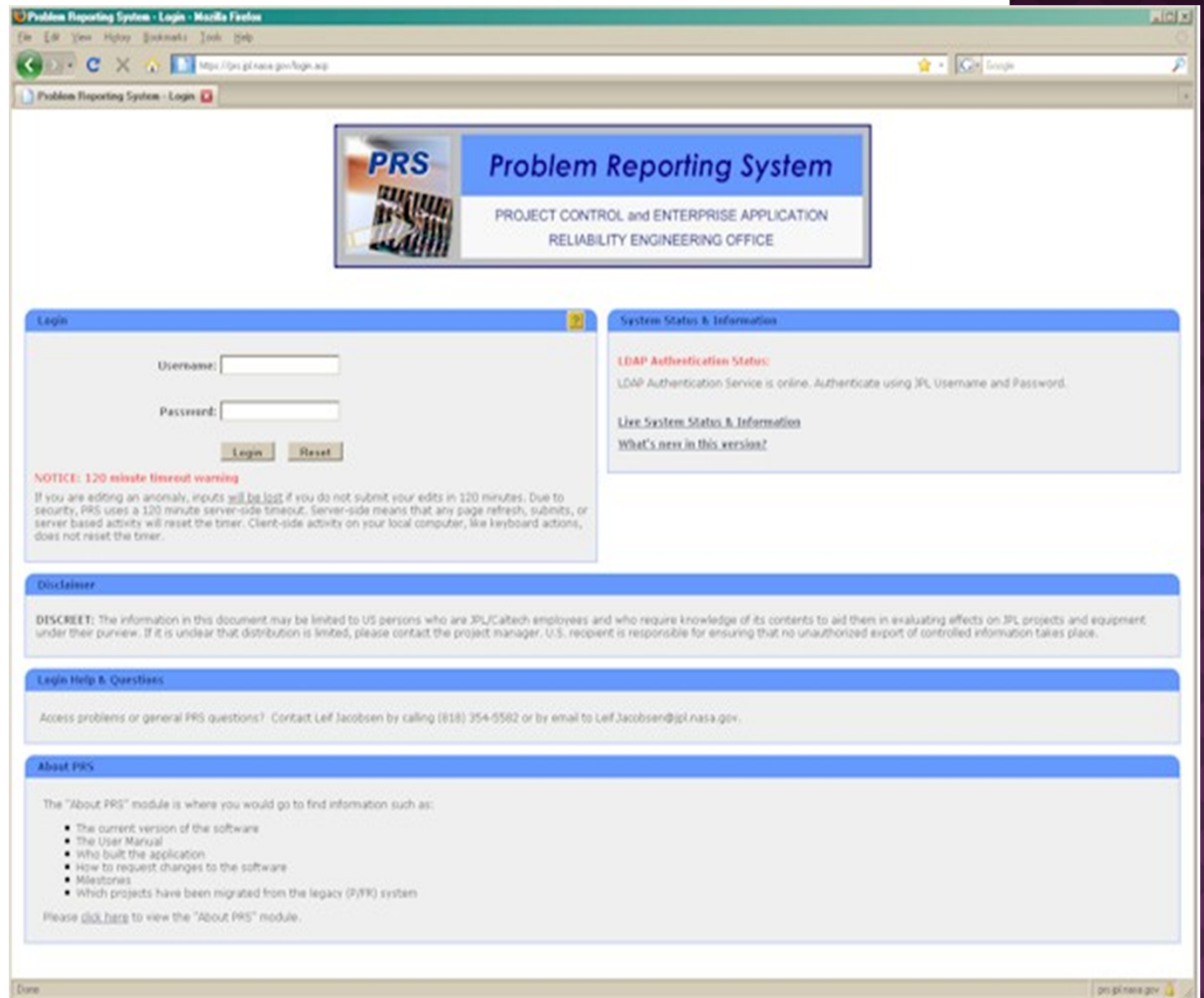
○ Open your browser **DISABLE POP-UP BLOCKER**

○ Enter  
prs-migrationtest\*  
during class or  
prs during  
operations

○ Hit Enter

○ You Should See

\*training only, for  
actual operations use:  
prs or  
<https://prs.jpl.nasa.gov>





# CONTINUING ON

- Enter your JPL user name & password
- Login

The image shows a login form for the PRS system. It has a blue header bar. The form contains two input fields: "Username:" with the text "lwbryant" and "Password:" with a masked password represented by dots. A red circle highlights both input fields. A pink arrow labeled "Enter" points to the "Username:" field. Below the input fields are two buttons: "Login" and "Reset". A pink arrow labeled "Click Here" points to the "Login" button. Below the buttons is a paragraph of text: "Warning: Inputs will be lost if you do not submit your edits in 120 minutes. Due to security, PRS uses a 120 minute timeout. Server-side means that any page refresh, submits, or server based activity will reset the timer. Your local computer, like keyboard actions, does not reset the timer."

# YOU SHOULD SEE SOMETHING LIKE

**Home** **Originate** **Tasks** **Search** **Reports** **Tools** **PRS Bug?** **Logout**

**Help** **Print** **You have open tasks.**

**My Tasks**

Number	Title	Assigned	Project	Type	Action
47625	Sol 2210 MER2A Spirit showing oddly...	1/25/2011	MER	PFR	
34560	Z88177 :: Midrange obstacle not...	8/9/2010	MER	PFR	
34555	Z88091 :: Stereo processing issue,...	8/9/2010	MER	PFR	
34554	Z88086 :: Unexplained minimal...	8/9/2010	MER	PFR	
34550	Z87704 :: Special decode fatal EVR...	8/9/2010	MER	PFR	
34543	Z86105 :: Duplicate of ISA Z86102:...	8/9/2010	MER	PFR	
34524	Z84748 :: FSWTB Script sc_power_cycle...	8/9/2010	MER	PFR	
34067	Z80771 :: BCB Specification Document...	8/9/2010	MER	PFR	
34009	Z80546 :: Several Commands With In...	8/9/2010	MER	PFR	
27148	Z90631 :: Rad750 EMC surom memory...	7/22/2010	MRO	PFR	

**Open Anomalies I Originated**

Number	Title	Phase	Open	Project	Type	Action
47625	Sol 2210 MER2A Spirit...	Verification / Analysis	79	MER	PFR	
30895	Z94417 :: Sun Off-center in...	Assignment / Assessment	358	MER	ISA	
13897	TEGA Gas Control Valve...	Signature	910	PHX	PFR	

**Anomalies I Can Sign**

Number	Title	Project	Type	Required/Optional	Sign
26561	Z94438 :: STL: 'out of sync' frames...	JUNO	ISA	Required	
34680	Juno TT-6: MIF software processing...	JUNO	ISA	Required	
35410	GDS 5.3 Rampage Systems Overview page...	JUNO	ISA	Required	
36684	gen_command printscmf bit rate...	JUNO	ISA	Required	
47176	RAMPAGE: Timing issue with creating...	JUNO	ISA	Required	
47233	incorrect subnet entry in...	JUNO	ISA	Required	
47606	Science SVT - one JIRAM science data...	JUNO	ISA	Required	
48021	During Solar Thermal Vacuum, EPP...	JUNO	ISA	Required	
48021	702875: heating when the robot has...	MER	ISA	Required	

**My Work In Progress**

You do not have any work in progress.

**My Advanced Queries**

Name	Date Last Used
Juno Closed Crit 1 or 2 Month	4/12/2011 1:02:54 PM
Juno Opened Crit 1 or 2 Month	4/12/2011 1:02:21 PM
Juno Crit 1 or 2	4/12/2011 1:01:22 PM
Juno Closed Month	4/12/2011 1:00:32 PM
Juno Opened Month	4/12/2011 1:00:01 PM
Juno ATLO	4/12/2011 12:55:21 PM
MER Closed Crit 1 or 2 Month	4/1/2011 9:02:34 AM
MER Opened Crit 1 or 2 Month	4/1/2011 9:02:19 AM
MER Closed Month	4/1/2011 9:01:55 AM
MER Opened Month	4/1/2011 9:00:39 AM

**People I Can Proxy**

You are not a proxy.

**Quick Search**

Search

- This is “My Workspace” or Home page

# THE HOME PAGE

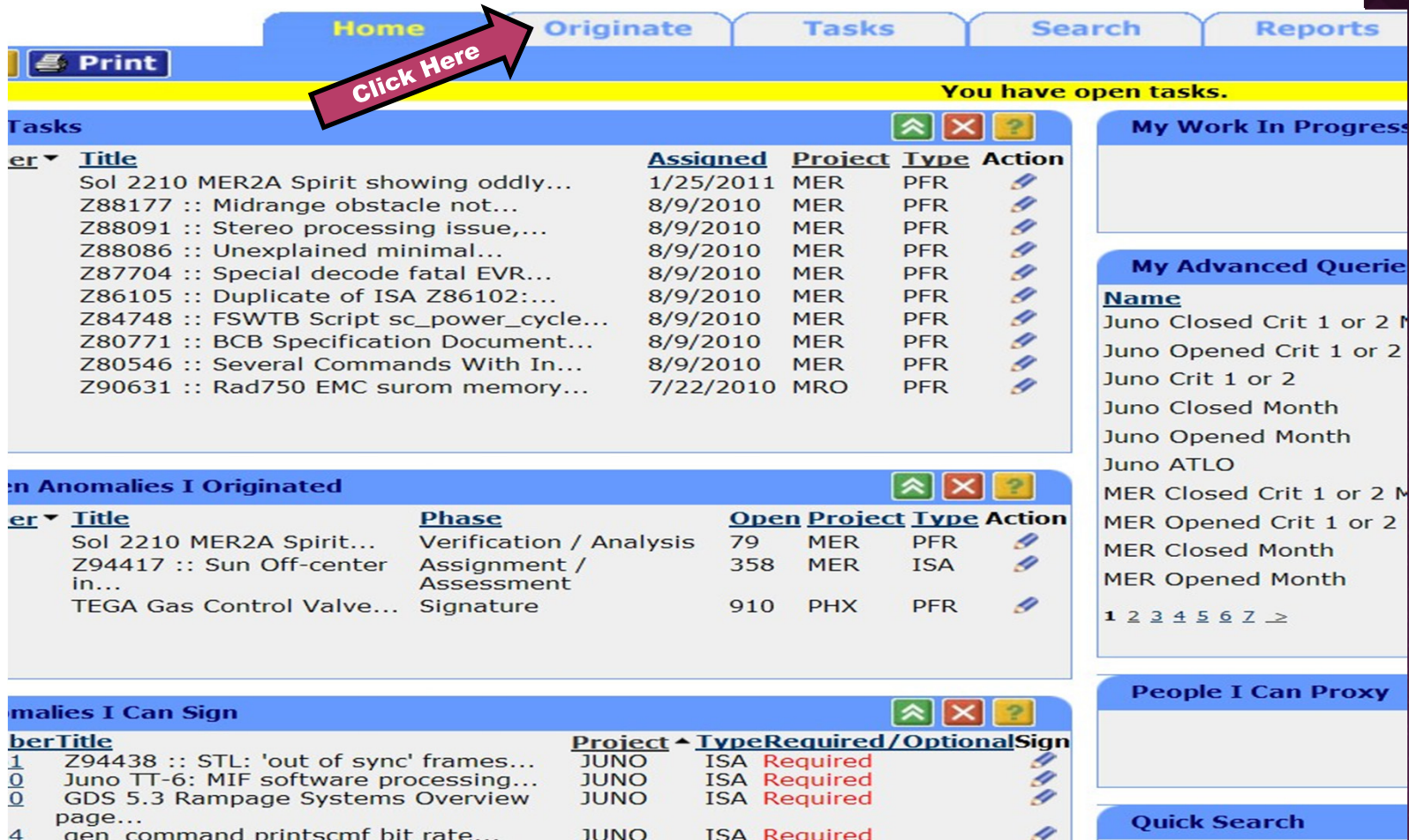
- ◉ My Workspace is the 'Home' page for the PRS application. It is the first thing you see once you log into PRS. This page contains a number of sections that summarizes all your activities on PRS. Anomalies you've been assigned, anomalies you originated, anomalies you worked on, search functionality, proxies, etc.
- ◉ 'My Workspace' contains all the information (split into sections) you need to locate and work your anomalies. You can get to 'My Workspace' from anywhere in the application by clicking on the 'Home' tab.

# THE HOME PAGE (CONTINUED)

- ◉ Here are the section names of My Workspace with short explanations of what they do:
  - My Tasks - In this section, you will be presented with anomalies that you are responsible for addressing and their current status.
  - Anomalies I Originated – This section lists the anomalies you have originated and their current status.
  - Anomalies I Can Sign – This section lists the anomalies that are in the signature cycle which you can sign.
  - Open Anomalies I Worked - This section lists the anomalies you have worked on, and their current status.
  - My Work In Progress – This section lists the anomalies you have been working on and saved, but have yet to submit.
  - My Advanced Queries – This section lists all custom reports you created and saved using the Query Wizard.
  - People I Can Proxy – This section displays a list of people who have given you permission to complete a task on their behalf.
  - Quick Search – Searches for anomalies containing a Keyword you have specified



# LET'S ORIGINATE AN ISA



**Home** **Originate** **Tasks** **Search** **Reports**

**Print** **You have open tasks.**

**Tasks**

er	Title	Assigned	Project	Type	Action
	Sol 2210 MER2A Spirit showing oddly...	1/25/2011	MER	PFR	
	Z88177 :: Midrange obstacle not...	8/9/2010	MER	PFR	
	Z88091 :: Stereo processing issue...	8/9/2010	MER	PFR	
	Z88086 :: Unexplained minimal...	8/9/2010	MER	PFR	
	Z87704 :: Special decode fatal EVR...	8/9/2010	MER	PFR	
	Z86105 :: Duplicate of ISA Z86102:...	8/9/2010	MER	PFR	
	Z84748 :: FSWTB Script sc_power_cycle...	8/9/2010	MER	PFR	
	Z80771 :: BCB Specification Document...	8/9/2010	MER	PFR	
	Z80546 :: Several Commands With In...	8/9/2010	MER	PFR	
	Z90631 :: Rad750 EMC surom memory...	7/22/2010	MRO	PFR	

**Anomalies I Originated**

er	Title	Phase	Open	Project	Type	Action
	Sol 2210 MER2A Spirit...	Verification / Analysis	79	MER	PFR	
	Z94417 :: Sun Off-center in...	Assignment / Assessment	358	MER	ISA	
	TEGA Gas Control Valve...	Signature	910	PHX	PFR	

**Anomalies I Can Sign**

ber	Title	Project	Type	Required/Optional	Sign
1	Z94438 :: STL: 'out of sync' frames...	JUNO	ISA	Required	
0	Juno TT-6: MIF software processing...	JUNO	ISA	Required	
0	GDS 5.3 Rampage Systems Overview page...	JUNO	ISA	Required	
4	gen command printscmf bit rate...	JUNO	ISA	Required	

**My Work In Progress**

**My Advanced Queries**

**Name**

Juno Closed Crit 1 or 2 M

Juno Opened Crit 1 or 2

Juno Crit 1 or 2

Juno Closed Month

Juno Opened Month

Juno ATLO

MER Closed Crit 1 or 2 M

MER Opened Crit 1 or 2

MER Closed Month

MER Opened Month

1 2 3 4 5 6 7 >

**People I Can Proxy**

**Quick Search**

Click on Originate

# SELECT THE ISA MODULE

[Home](#) [Originate](#) [Tasks](#) [Search](#) [Reports](#) [Tools](#) [PRS Bug?](#)

[? Help](#) [Print](#) [PFR/DPFR](#) · [ISA](#)

Originate: Sub-Navigation

Module Name	Module Description
<a href="#">PFR/DPFR</a>	Problem/Failure Report - Flight/flight-like hardware, software, and support equipment anomalies pre-launch; post-launch flight hardware/software design problems or failures
	Developmental Problem/Failure Report - Developmental hardware, software, and support equipment anomalies for flight projects pre-launch.
 <a href="#">ISA</a>	Incident, Surprise, or Anomaly - Flight hardware, software, ground support equipment, and procedural anomalies during mission operations (pre- and post-launch)



# A QUESTION BEFORE WE CONTINUE

- ◉ How soon after an event must an ISA be initiated?
- ◉ Previous standard said 24 hours
- ◉ New standard says as soon as practical
  - Which is realistically within about 24 hours
  - You need enough time to make sure the problem is real and to be able to describe what happened
  - But not so long that you forget about it

The TITLE should clearly identify the problem for non project types (e.g. someone else with a similar instrument)

“Channel A-130 increased from 108 to 275” is marginal at best

“Antenna Motor current increased to over twice it’s allowed maximum value” gives better context

Dates are auto populated, so make sure they are correct (date you opened ISA and date of incident – they may be different)

Mozilla Firefox

/Action.aspx?pagemode=ISA

Home Originate Tasks Search Reports

PER · ISA

se Anomaly (ISA)

! Title: Safe mode entry on 02/32/2013 due to apparant star tracker failure

Originator Name: Larry W Bryant

Organization: 314F

Phone: 3-7875

Mail Stop: 230-305

Origination Date: 10/15/2009

Date of Incident: 10/15/2009

**Dates**

Enter the title here

October 2009

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7

# LET'S ENTER KEY INFORMATION

# MORE REQUIRED INFORMATION

- Next you select the project from **the drop down menu**. Click on the down arrow to view the menu.
- If this problem affects other projects, or could affect them, select those from the list in the next box.
- Don't forget to select the spacecraft ID if defined

The screenshot shows the 'Projects Affected' section of a form. The 'Main Project Affected' dropdown menu is open, displaying a list of projects. A red arrow points to the dropdown menu with the text 'Main Project Drop Down It hides the Other Projects Box'.

Projects Affected
! Main Project Affected: Select One...
! Spacecraft/Instrument ID: Select One...
Other Projects Affected:
ACRM - Active Cavity Radiometer Irradiance Monitor
AMD - Advanced Mirror Development
AIRS - Atmospheric Infrared Sounder
CAS - Cassini
CSSC - Cloudsat
DAWN - DAWN Project
DI - Deep Impact/Epoxi
DEV - ProdTest - Dev - Production Testing Project
DHAHN - DHahn Project
EMOS - Environmental Monitors on Station
EMLS - EOS MLS
GALX - Galex Explorer
GNS - Genesis
GRAIL - Gravity Recovery and Interior Laboratory
JASN - Jason
JUNO - JUNO
MGN - MAGELLAN
MER - Mars Exploration Rover
MEX - Mars Express

The screenshot shows the 'Projects Affected' section of a form. The 'Main Project Affected' dropdown menu is selected as 'GRAIL - Gravity Recovery and Interior Laboratory'. The 'Spacecraft/Instrument ID' dropdown menu is selected as 'Not Defined'. The 'Other Projects Affected' list is also visible. Red arrows point to the 'Main Project Affected' dropdown menu with the text 'Main Project', to the 'Spacecraft/Instrument ID' dropdown menu with the text 'S/C or Instrument ID', and to the 'Other Projects Affected' list with the text 'Other Project(s)'.

Projects Affected
! Main Project Affected: GRAIL - Gravity Recovery and Interior Laboratory
! Spacecraft/Instrument ID: Not Defined
Other Projects Affected:
JUNO - JUNO
MGN - MAGELLAN
MER - Mars Exploration Rover
MEX - Mars Express
MGS - Mars Global Surveyor
M01 - Mars Odyssey Project
MRO - Mars Reconnaissance Orbiter
MSL - Mars Science Lab
MISR - Multi-Angle Imaging Spectroradiometer
MGSS - Multi-Mission Ground System and Services

# ALMOST DONE ORIGINATING

- Describe what you expected and what you observed so whomever gets assigned to work the ISA can clearly understand what the issue is.
- If someone reported the problem to you, there's a slot for their name.
- It's **OPTIONAL**, but if there is a deadline for getting this issue fixed, you can select that date.
- All you have to do now is scroll down and click submit and the ISA is in the system.

**This is important, so be clear**

**Who told you there was a problem?**

**Gotta fix it by?**

**Click and it's outta your hair**

The screenshot shows a web form titled "Description" with a blue header. The main content area is titled "Description of Incident:" and contains a text box with instructions: "Describe the conditions you expected and the conditions you actually observed. Enter as much detail as you have in describing what the problem characteristics/symptoms are. This is important to the individual trying to reproduce/resolve/fix the problem to point them in the right direction and not off on a wild goose chase. Something like the following is good if you can provide it." Below this is a text box containing a detailed report about a telemetry issue during an orbit pass at DSS-75. To the right of the text box is a large red arrow pointing left with the text "This is important, so be clear". Below the text box are two input fields: "Reported By:" with the value "Ops Wienie" and "Date Required By:" with a calendar widget for October 2009. To the right of the calendar is a red arrow pointing left with the text "Who told you there was a problem?". Below the calendar is a red arrow pointing left with the text "Gotta fix it by?". At the bottom of the form is a blue bar with a "Submit" button. Below this bar is a white bar with "Submit", "Cancel", and "Save and Finish Later" buttons. A red arrow points to the "Submit" button with the text "Click and it's outta your hair". At the bottom of the page is a blue bar with "Help" and "Print" buttons, and a status bar with "Done" and "PER - ISA".

Submit

Submit Cancel Save and Finish Later

Help Print PER - ISA

Done



# HOW DO YOU KNOW?

- Go to your Home Page and confirm your success.
- You can select to view an ISA in a read only window.
- You can also choose the edit pencil to edit an ISA in this existing window.

The screenshot shows the 'Problem Reporting System - My Workspace for Larry Bryant' in Mozilla Firefox. The URL is <http://prs-uat/mainpage.asp?ErCode=6012&AnomalyID=15405>. The interface includes tabs for Home, Originate, Tasks, Search, Reports, and T. A yellow banner at the top displays a 'SUCCESS' message: 'ISA # 15405 submitted successfully.' Below this, the 'My Tasks' section contains a table with columns: Number, Title, Assigned, Project, Type, and Action. The table lists four tasks, with the last one (12968) having a pencil icon in the Action column. A red arrow points from the 'SUCCESS' message to the 'My Tasks' table. Another red arrow points from the pencil icon in the 'My Tasks' table to the 'Open Anomalies I Originated' section. This section contains a table with columns: Number, Title, Phase, Open, and Action. The first row (15405) has a pencil icon in the Action column. A red arrow points from the pencil icon in the 'Open Anomalies I Originated' table to the 'My Advanced Queries' section. The 'My Advanced Queries' section lists several queries: WISE PFR, WISE Open ISAs, Open WISE ISAs, and All WISE ISAs.

Problem Reporting System - My Workspace for Larry Bryant - Mozilla Firefox

<http://prs-uat/mainpage.asp?ErCode=6012&AnomalyID=15405>

Home Originate Tasks Search Reports T

Help Print

**SUCCESS** ISA # 15405 submitted successfully.

**My Tasks**

Number	Title	Assigned	Project	Type	Action
13173	Frames out of sync between Ele	10/1/2008	EPP	PFR	
13136	Transition to boot/safe with	10/1/2008	EPP	PFR	
13135	Electra HB stopped updating after	10/1/2008	EPP	PFR	
12968	Electra reboot during 148_10, 149_11...	10/1/2008	EPP	PFR	

**Open Anomalies I Originated**

Number	Title	Phase	Open	Project	Action
15405		Assignment / Assessment	0	MGM	

**My Advanced Queries**

Name
WISE PFR
WISE Open ISAs
Open WISE ISAs
All WISE ISAs

Click the pencil to edit in this window

Click for read only view in a new window

# REMEMBER THE DASHED LINE?

- ◉ It contains these optional sections . . .
  - Identify the environment where you were working
  - If you know where, why or when, these are useful
  - In particular, your initial assessment of the criticality and the priority for working the issue are useful bits of info.
  - The actual Criticality Rating is MOAM role in next phase,
- ◉ These can be completed when the data is available

The image shows two screenshots of a software interface. The top screenshot is titled 'Environment' and contains the following fields: Workstation Name, Operating System, Operating System Version, Flight SW Version, Ground SW Version, Subsystem Name, Program Name, and Reproducible (a dropdown menu). A large red arrow points to these fields with the text 'What workstation and/or software, etc. were in use?'. The bottom screenshot is titled 'Codes and Ratings' and contains the following fields: Location, Initial Criticality Rating, Priority, Suspected Cause, Mission Activity, Project Phase, Mission Phase Affected If Not Corrected, and Software Type (a list box with options: Not Defined, Flight Software, Ground Software, Undetermined). A red arrow points to the 'Location', 'Initial Criticality Rating', and 'Priority' fields with the text 'These two are quite useful'.

**Environment**

Workstation Name:

Operating System:

Operating System Version:

Flight SW Version:

Ground SW Version:

Subsystem Name:

Program Name:

Reproducible:

**What workstation and/or software, etc. were in use?**

**Codes and Ratings**

Location:

Initial Criticality Rating:

Priority:

Suspected Cause:

Mission Activity:

Project Phase:

Mission Phase Affected If Not Corrected:

Software Type:   
Flight Software  
Ground Software  
Undetermined

**These two are quite useful**



# NOW THE MOAM GOES TO WORK

- ◉ When an ISA is originated, the MOAM receives an e-mail and will do a couple of things
  - First is to assign the ISA to a Team Lead (aka Responsible Editor in PRS talk)
  - Second is to assign the Criticality
- ◉ Both of these items can be changed later if (Heaven Forbid) the MOAM should make an error

# DID YOU GET AN E-MAIL FROM PRSHELP?

- ◉ With a subject that identifies an ISA, a project, and references a PRS life-cycle phase, like
  - ISA 48489 for JUNO has entered Assignment / Assessment phase
- ◉ This means an anomaly has been
  - assigned to you and/or
  - changed life-cycle phase.
- ◉ What this means to you and how you can respond will be covered in the remainder of this session

# IN YOUR PRS HOME PAGE

- Look in My Tasks
- Choose the action pencil to edit an ISA
- You can also open the ISA in read only mode (click on ISA number) and then choose to edit it,
- Either way opens a small pop-up window

Reporting System - My Workspace for Larry Bryant - Mozilla Firefox  
https://prs.jpl.nasa.gov/mainpage.asp

Home Originate Tasks Search Reports

Print

You have open tasks.

Title	Assigned	Project	Type	Action
Frames out of sync between Electra...	10/1/2008	EPP	PFR	
Transition to boot/safe with elevated...	10/1/2008	EPP	PFR	
Electra HB stopped updating after HB...	10/1/2008	EPP	PFR	
Electra reboot during 148_10, 149_11...	10/1/2008	EPP	PFR	

My Work In Progress

Advanced Queries

Crit 2  
ISAs  
ISAs  
As

Crit 4  
All Wise Crit 3  
All WISE Crit 1  
Closed Wise

People I Can Proxy

omalties I Originated

You have not originated any anomalies in the last 180 days.

es I Can Sign

You have no anomalies to sign.

omalties I Worked

Title	Phase	Open	Project	Type
WISE ORT3 ATTITUDE AND RATE...	Action	22	WISE	ISA
Network throughput from WSC...	Action	64	WISE	ISA

Click the pencil to edit

# IF YOU ARE THE RESPONSIBLE EDITOR

- You can “Reassign” the ISA to one of your team members to work.
- If you were wrongly assigned as Responsible Editor, notify your MOAM.

Reassign Anomaly # 15068 - Mozilla Firefox

http://prs-uat/anomaly\_reassign.asp

Home Originate **Tasks** Search Reports

Help Print Assignments Signatures

Anomaly # 15068 - Action: Reassign

Currently Assigned to: Beth E Fabinsky

Enter Name Or Badge # Faris Find Next

- Fan, Ted (114101)
- Fang, Houfei (103748)
- Fang, Wai-Chi (102778)
- Fanson, James L (106100)
- Farfan, Martha (125957)
- Ferguson, Christine T (105138)
- Farina, Frederic (115779)
- Faris, Grant B (105307)**

! Assign Anomaly to:

! Reassignment Comment: Demonstrate (re)assignment function.

Note: ! Denotes a required field.

Submit Reset Cancel

# IF IT'S YOURS TO WORK

- Once you are in the edit mode
- You can scroll down and enter the information you have available.
- Repeat as necessary until you have completed all your closure activity, including

■ ■ ■

**Analysis**

Analysis and Impacts:

Analysis is conducted and documented in the ISA to clearly define the problem, determine the proximate cause, address the effect of the event on associated elements of the subsystem and system, and determine the necessary corrective actions.

NOTE: For criticality 1 and 2 ISAs, it is desirable to conduct a practical root cause analysis. It is normally sufficient to document that analysis with a Cause Chain (attached to the ISA). Fault Tree or Fishbone analysis may be directed by the Mission Manager or Project Manager when the problem is severe enough to justify the expenditure of the necessary resources.

Analysis and Impacts - Actual Hours:

Section Last Modified By:

**How you fixed it**

Corrective Action Taken

Corrective Action:

Actions taken to correct the problem are documented in the Corrective Action section of the ISA. Corrective actions that include changes to the project configuration and/or documentation should include change requests processed in accordance with the project's configuration management plan and referenced on the ISA prior to closeout review and approval. Verification of corrective action may include analyses, testing, and/or demonstration. After completion of corrective action, when feasible, the item is subjected to the conditions under which the problem occurred to verify the effectiveness of the corrective action.

Cause Codes:

Done

**Enter your analysis of the problem, including its impact and any immediate action taken to restore normal operations**

**OR**

**Enter the corrective action taken to permanently fix the problem and hopefully correct the root cause.**



# WORKING IT (CONTINUED)

- Including any testing you performed and the test results that show the fix you implemented worked.
- Then let your team lead know, and

■ ■ ■

Action: Edit Content | Anomaly ID: 15013 - Mozilla Firefox

http://prs-uat/net/Action.aspx

Test/Verification

Test Verification:

Verification of corrective action may include analyses, testing, and/or demonstration. After completion of corrective action, when feasible, the item is subjected to the conditions under which the problem occurred to verify the effectiveness of the corrective action.

Test Description

Test & Verification Actual Hours:

Test Results Verification:

Test Results, especially Root Cause correction

Section Last Modified By:

Done

**Scroll on down after you have verified your fix and enter a description of what you did and what the results were. Make particular note if you confirmed correction of root cause.**



# WORKING IT (CONTINUED)

- ◉ If you believe this ISA documents a command file error, you can select yes, or leave it to the MOA
- ◉ The MOAM is responsible for filling in the remaining fields

MOAM Categorizes, identifies cause, etc.

Mission Phase Affected If Not Corrected:

Software Type:

Command File Module -- To be filled out by the MOAM

Command File Error:

Category:

Uplink Process Locations:

Error Causes:

Corrective Actions:

Related Documents

Related Documents: No Related Documents

Add Related Document:   
Type:

# MOVE TO SIGNATURE PHASE

- Once you have completed your actions, you can move the ISA to the signature phase with a few mouse clicks.

The screenshot displays the ISA interface. At the top, a blue navigation bar contains tabs: Home, Originate, Tasks (highlighted), Search, Reports, Tools, and PRS Bug. Below the navigation bar, a yellow banner reads "Anomaly Updated." with a link to "Edit This Anomaly".

The main content area shows the "Responsible Editor: Beth Fabinsky" and "Assigned to: Grant Chris". Below this, a phase transition diagram is shown. It consists of three colored boxes: a green box labeled "Original", a blue box labeled "Signature", and a grey box labeled "Closed". A large red arrow points from the "Original" box to the "Signature" box, with the text "Confirm the Phase" written inside the arrow. Below the boxes, a legend indicates: green square for "Completed Phases", blue square for "Current Phase", and grey square for "Other Phases".

Below the phase transition diagram, there is a link "View Anomaly History".

At the bottom, there is a table with three columns: "Destination Phase", "Action Menu", and "Destination Phase". The "Action Menu" column contains links: "Sign", "Close", "Edit Content", "Reject / Clarify", and "Upload File". The "Destination Phase" columns contain the text "Closed".

# SIGNING AN ISA

- If there are ISAs ready for you to sign, they will show up in this box. Just click the pencil to go to the signature window.
- NOTE that ISAs can be signed in parallel once they are in the signature cycle. You do not have to wait for someone above or below you on the list to sign.

Problem Reporting System - My Workspace for Larry Bryant - Mozilla Firefox

http://prs-uat/mainpage.asp?ErCode=6012&iAnomalyID=15405

Home Originate Tasks Search

Help Print

ISA # 15405 submit

### My Tasks

Number	Title	Assigned	Project	Type	Action
13172	Frames out of sync between Electra...	10/1/2008	EPP	PFR	
13175	Transition to boot/safe with elevated...	10/1/2008	EPP	PFR	
13176	Electra HB stopped updating after HB...	10/1/2008	EPP	PFR	
12978	Electra reboot during 148_10, 149_11...	10/1/2008	EPP	PFR	

### Open Anomalies I Originated

Number	Title	Phase	Open	Project	Type	Action
15405	Safe mode entry on...	Assignment / Assessment	0	MGN	ISA	

### Anomalies I Can Sign

Number	Title	Project	Type	Required/Optional	Sign
15099	FP Command Loss timer fired during 48...	WISE	ISA	Required	
15070	WISE MST5 Cover Eject Payload Power Up	WISE	ISA	Required	

# SIGNING AN ISA (CONTINUED)

- You can also select sign on the action menu.
- Your next window shows who can sign. Click by your name.
- You must answer, but it has no affect.
- Click submit and voila!

Item - Multiple Signatures - Mozilla Firefox

multiple.asp?ProjectID=&AnomalyID=15099&bUnlock=True

Home Originate **Tasks** Search Reports Tools PRS Bug?

Assignments Signatures

Anomaly Updated.

maly (#15099)

ired during 48 hour SWTB Test

Label	Signer Role	Signature Condition	Required/Optional	Action
Team Lead	RESPONSIBLE EDITOR		Required	Completed
Mission Operations Assurance	CONDITIONAL APPROVER	Required All ISAs	Required	Completed
Project Manager	CONDITIONAL APPROVER	ISA Criticality 1	Required	Completed
Mission Manager	CONDITIONAL APPROVER	Required All ISAs	Required	Completed

You did it

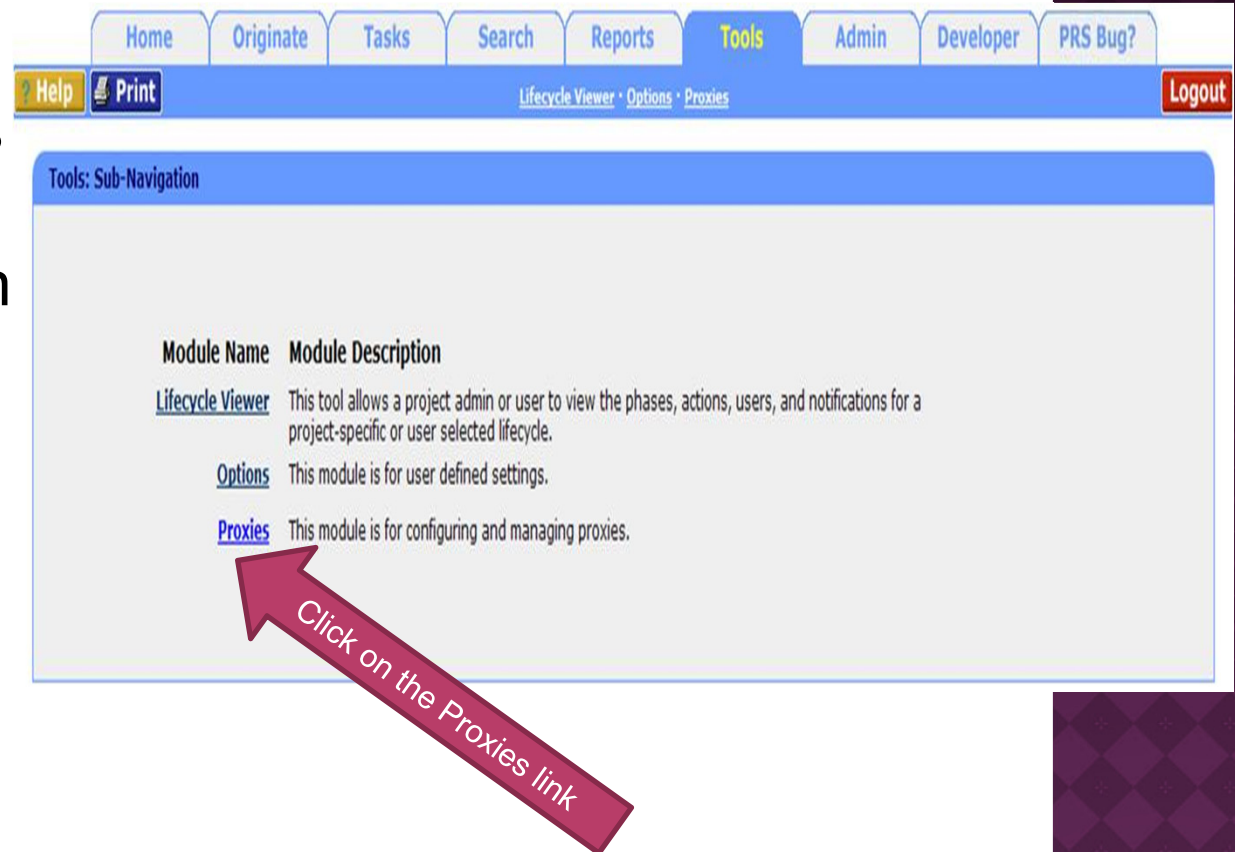
Go Back Close This Anomaly

Office of Safety and Mission Success 21-May-12 32



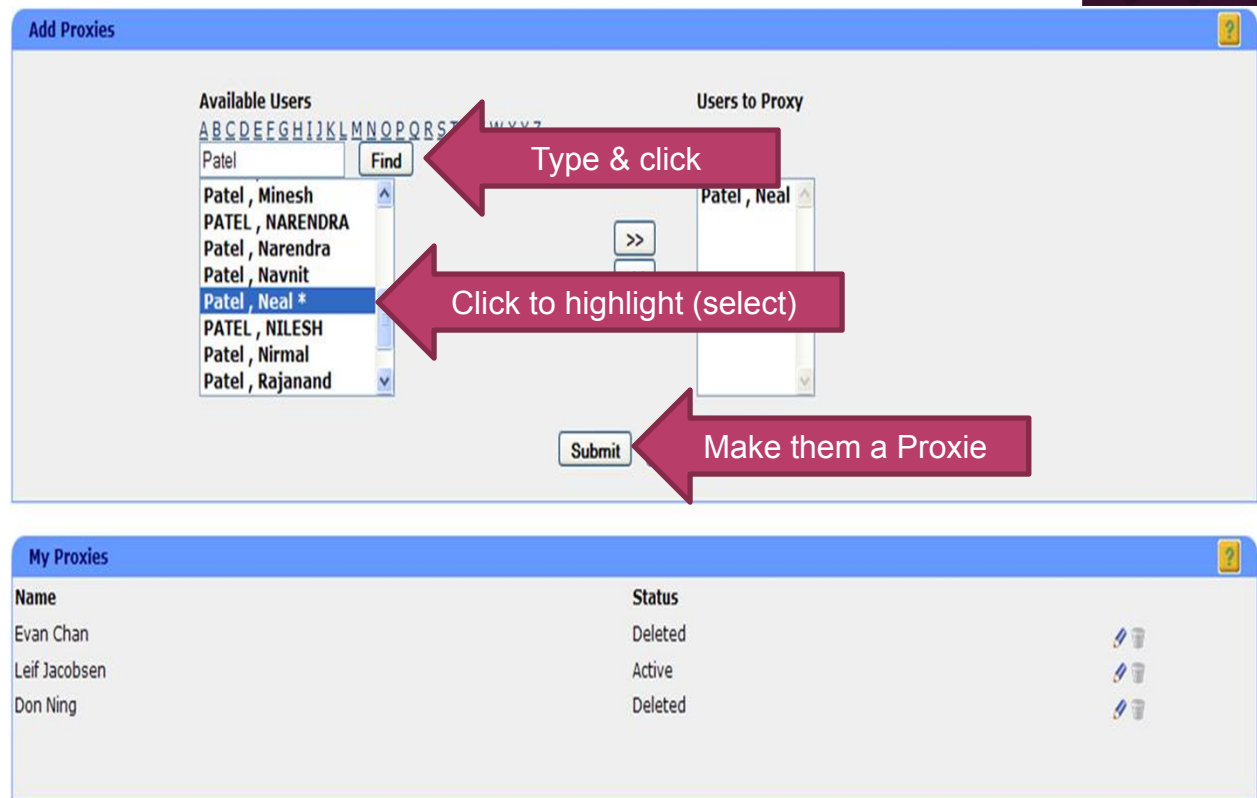
# LET SOMEONE ELSE SIGN

- You can set up a Proxy, which allows someone else (like your deputy) to sign for you if you can't get to it.
- To create a new proxy, click on the 'Tools' tab from the navigation menu, then click on 'Proxies' and see



# LET SOMEONE ELSE SIGN

- Type in a few letters of their last name and click find.
- Select the unsuspecting . . .
- Click submit to saddle them with the signature task





# IF YOU NEED TO ATTACH FILES

The screenshot displays two overlapping browser windows from the Problem Reporting System. The left window, titled 'Problem Reporting System - Action - Mozilla Firefox', shows the 'Available Actions in Phase: Signature' section. It includes a table with phases: Origination, Assignment / Assessment, Action, Signature, and Closed. The 'Action' phase is highlighted in yellow, and the 'Upload File' link is visible in the Action Menu. The right window, titled 'Upload Attachments - Mozilla Firefox', shows the 'Choose File(s) to Upload' section with a 'Browse...' button. A 'File Upload' dialog box is open, showing a file named 'Sample for ISA Upload.doc' selected. A red callout box with white text points to both the 'Upload File' link and the 'Add Another Attachment' button, stating: 'You have two places you can access the upload tool. File selection and upload is fairly intuitive.'

**Problem Reporting System - Action - Mozilla Firefox**  
http://prs-migrationtest/action\_display.asp?AnomalyID=35200&smode=pop

Edit Anomaly Action Menu Close Window Print

**Available Actions in Phase: Signature**

Responsible Editor: [Larry Bryant](#)  
Assigned to: [Larry Bryant](#)

Origination	Assignment / Assessment	Action	Signature	Closed
Completed Phases	Current Phase	Other Phases		

[View Anomaly History](#)

Destination Phase	Action Menu	Destination Phase
	<a href="#">Sign</a>	
	<a href="#">Close</a> >> Closed	
	<a href="#">Edit Content</a>	
Action <<	<a href="#">Reject / Clarify</a>	
	<a href="#">Upload File</a>	

**Upload Attachments - Mozilla Firefox**  
http://prs-usd/Net/UploadAttachments.aspx

Home Originate Tasks Search Reports Tools PRS Bug? Logout

Help Print

Choose File(s) to Upload

1 Browse...

Upload Cancel

**File Upload**

Look in: Operations

My Recent Documents Desktop My Documents My Computer My Network Places

File name: Sample for ISA Upload.doc Open

Files of type: All Files Cancel

**Attached Files**

Browse... Remove

Add Another Attachment

**Issues**

**You have two places you can access the upload tool. File selection and upload is fairly intuitive.**

# REPORTS

Generate
Export To Excel

## Open ISA Status Report

**Project Name:** Mars Reconnaissance Orbiter  
**Page Number:** 1

**(MRO 100.03) Deep Space Network (DSN )**

ISA No.	Title	Criticality Rating	Assignee	Incident Date	Days Open	Correction Required Date	Team Lead	System Engineer	Configuration Management	Mission Management	Project Management	Mission Operation Assurance		
28598	Z93526 :: Two-way Doppler tracking data	3 - Negligible impact or threat to	Susan Kurtik	2/13/09	496	11/30/09	Susan Kurtik	Reid Thomas	John Fleener	Martin Johnston		Larry Bryant	David Herman	
							5/14/09							
28697	Z94229 :: Mro_CDR stopped receiving data	3 - Negligible impact or threat to	Susan Kurtik	1/20/10	155		Susan Kurtik	Reid Thomas	John Fleener	Martin Johnston		Larry Bryant		

**(MRO 100.04) End to End Data Accountability Team (eeDAT )**

ISA No.	Title	Criticality Rating	Assignee	Incident Date	Days Open	Correction Required Date	Team Lead	System Engineer	Configuration Management	Mission Management	Project Management	Mission Operation Assurance		
28743	Z94503 :: cgreg alias in eeDAT .aliases files	3 - Negligible impact or threat to	Katherine Moyd	6/8/10	16		Katherine Moyd	Reid Thomas	John Fleener	Martin Johnston		Larry Bryant		

**(MRO 100.05) Electra Science (ELECTR)**

ISA No.	Title	Criticality Rating	Assignee	Incident Date	Days Open	Correction Required Date	Team Lead	System Engineer	Configuration Management	Mission Management	Project Management	Mission Operation Assurance		
28481	Z92750 :: Electra hail at end of 164 - MRO/PHX	2 - Significant impact or threat to	Mazen Shihabi	6/16/08	738		Mazen Shihabi	Reid Thomas	John Fleener	Martin Johnston		Larry Bryant		
							5/19/09							
28557	Z93231 :: Anomalous v Telemetry and ELECTR	3 - Negligible impact or threat to	Mazen Shihabi	10/29/08	603		Mazen Shihabi	Reid Thomas	John Fleener	Martin Johnston		Larry Bryant		
							5/19/09							
28615	Z93632 :: Electra - Unexpected closure of link	3 - Negligible impact or threat to	Mazen Shihabi	8/18/09	463		Mazen Shihabi	Reid Thomas	John Fleener	Martin Johnston		Larry Bryant		
							5/19/09							
28652	Z93879 :: Electra did not rehaul when physical link	3 - Negligible impact or threat to	Mazen Shihabi	6/17/09	372		Mazen Shihabi	Reid Thomas	John Fleener	Martin Johnston		Larry Bryant		
28722	Z94339 :: Electra Scorecards not reporting	3 - Negligible impact or threat to	Mazen Shihabi	8/11/10	105		Mazen Shihabi	Reid Thomas	John Fleener	Martin Johnston		Larry Bryant		

# SIMPLE SEARCH

- Select the search tab, then select Simple Search

Module Name	Module Description
<a href="#">Anomaly</a>	Search for anomalies by Title, comment or number.
<a href="#">Query Wizard</a>	Search for anomalies in a Wizard format.  This tool has the ability to search by Project related data, Anomaly related data, Lifecycle related data, Users associated with anomalies, Item (subsystem) related data, and Picklist data such as codes and ratings. You can search by these types individually, or in combination. You can also save queries to be run later, with the option of editing the saved query before running it.
<a href="#">User</a>	Search for Users by name.
<a href="#">Simple Search</a>	No Help Available
<a href="#">Legacy Search</a>	No Help Available

# SIMPLE SEARCH

Simple Search

Word Search:

Anomaly #:

Project:

Select One...

Status:

☐ Open ☐ Close

Report Type:

☐ PFR ☐ DPFR ☐ ISA

Personal Safety:

Select One...

Hardware Safety:

Select One...

Risk Class:

Significant

Potential Red Flag

Red Flag

Failure Effect Rating:

Select One...

Failure Cause / Corrective Action Rating:

Select One...

ISA Criticality:

Select One...

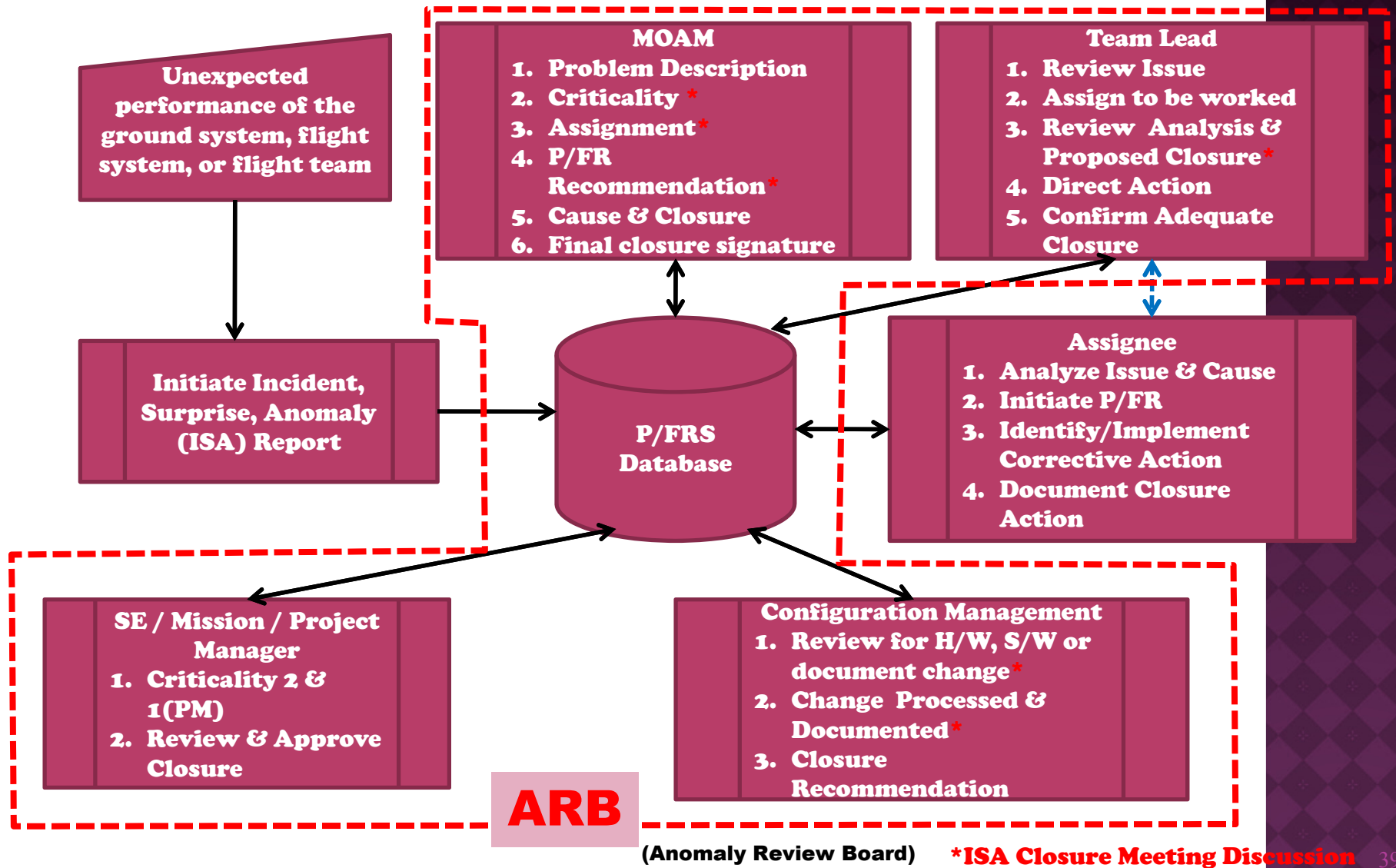
10003

10004

10005

10007

# LET'S REVISIT THE PROCESS





# GOTCHAS (FROM THE DEVELOPERS)

- ◉ Multiple Windows
  - PRS opens a pop up window when you view/edit an anomaly
  - Close **(NOT Logout)** the extra window after you are done with a particular anomaly
- ◉ PRS does not automatically save your work. Please be sure to submit your work before closing the window. If you have to step away while you are in the middle of an origination, please use the 'Save and Finish Later' function
- ◉ Anomalies are locked while you are editing an anomaly. This means no one else can edit the anomaly you have open for edit. So please be considerate and don't leave it open when you walk away 😊
- ◉ You can only have one active locked anomaly at a time. If you have an anomaly open in the edit page, and you open another anomaly for edit, you will lose the lock on the first anomaly
- ◉ Remember to Logout of the system when you are done

# ACCESS & CALL FOR HELP

- ◉ URL for ISAs: <https://prs.jpl.nasa.gov>
- ◉ Login
  - PRS uses the JPL Directory (LDAP) Username and Password. This is the same one you use for Docushare & JPL Rules!
- ◉ PRS Product Lead:
  - Mona Postma
  - Tel: 818-354-5925
  - Email: [Mona.H.Postma@jpl.nasa.gov](mailto:Mona.H.Postma@jpl.nasa.gov)

# AND THE HIGHER AUTHORITY

- ◉ Section 513 PFR/ISA Process Owner
  - Leslie Callum
  - Tel: 818-354-3039
  - E-mail: [Leslie.N.Callum@jpl.nasa.gov](mailto:Leslie.N.Callum@jpl.nasa.gov)
- ◉ Anomaly Resolution Standard, Rev 6
  - JPL Rules Document ID 35506
  - Standard used to define effective anomaly reporting for Developmental Problem/Failure Report (DP/FR), Problem/Failure Report (P/FR), and Incident Surprise Anomaly (ISA) Report.
- ◉ And your own Project Mission Operations Assurance Plan

**YOU ARE DONE, CONGRATULATIONS 😊**